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Assessing Undergraduate Nursing Students' Knowledge, Attitudes and Cultural Competence in Caring for LGBT Patients

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Abstract

Lesbian, gay, bisexual, and transgender (LGBT) patients experience barriers to health care that include fear of discrimination and limited access to providers knowledgeable about and sensitive to the LGBT population and their specific health needs. This study examined the effectiveness of an educational intervention conducted at Illinois Wesleyan University designed to improve knowledge level and attitudes of nursing students toward LGBT patient care. The educational intervention focused on key terminology, health disparities, medical needs of transgender patients and culturally sensitive communication skills necessary for competent LGBT patient care. Knowledge level and attitudes were evaluated before and after the educational intervention using a survey based on a modified Attitudes Toward Lesbians and Gay Men Scale, and two assessment tools developed for this study. The results of this study showed both an improvement in attitudes and an increase in knowledge level directly after the educational intervention. Implications of this study support the inclusion of content related to LGBT patient healthcare into undergraduate nursing curricula to enhance knowledge as well as to promote cultural competence and sensitivity.

Assessing Undergraduate Nursing Students' Knowledge, Attitudes and Cultural Competence in Caring for LGBT Patients

Lesbian, gay, bisexual and transgender (LGBT) individuals experience barriers to healthcare in the United States (U.S.) causing health disparities. Discrimination and uninformed healthcare providers can exacerbate this issue. One common form of discrimination is homophobia, an irrational fear, aversion, or discrimination of homosexuality or homosexuals (Röndahl, Innala, & Carlsson, 2004). Bisexuality, transgender people, and other sexual minority groups are also commonly met with discrimination and encounter less than ideal healthcare environments.

Globally, as well as in the U.S., the LGBT population experiences unequal treatment compared to heterosexuals. The International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA) reported that "no less than 80 countries around the world consider homosexuality illegal and that in 5 of them - Iran, Mauritania, Saudi Arabia, Sudan, Yemen - and in parts of Nigeria and Somalia, homosexual acts are punishable with death" (Ottosson, 2009, p. 4). These laws reflect severe intolerance of sexual minorities in several countries. In 2008, the World Health Organization (WHO) published a Commission on the Social Determinants of Health entitled *Closing the Gap in a Generation.* The list of determinants included "early childhood development, globalization, health systems, employment conditions, priority public health conditions, measurement and evidence, women and gender equality, urbanization, and social exclusion" (Logie, 2012, p. 1243). Sexual orientation was excluded as a social determinant of health despite evidence that shows sexual minorities experience lower levels of health due to stigma (Bolton & Sareen, 2011; Lehavot & Simoni, 2011). While homosexuality is considered illegal in many countries around the world, and several studies have shown

significant health disparities among LGBT people, the needs of the LGBT population continues to be ignored.

The Connection between Stigma and Health Disparities

Sexual minorities are often invisible to society and experience stigma leading to poor health outcomes (Igartua, Gill, & Montoro, 2003). Lehavot and Simoni (2011) studied sexual minority women, lesbians and bisexual women, and reported that women who exhibited a more masculine/butch gender expression experienced discrimination more frequently. A significant link was also found between minority stress and increased mental health and substance abuse disorders (Lehavot & Simoni, 2011). Brooks (1981) defined minority stress as, "the stress to which individuals from stigmatized social categories are exposed to as a result of inferior social status" (Lehavot & Simoni, 2011, p. 160). These results imply that members of the LGBT community who are gender non-conforming or sexual minorities are at high risk for minority stress, and therefore are also at higher risk for mental health and substance abuse disorders.

The LGBT community has been found to have higher rates of tobacco use when compared to the general population. Gruskin, Greenwood, Matevia, Pollack and Bye (2007) conducted a statewide phone survey of 31,000 households in California, of which 3,000 contained one or more eligible participant. They reported that approximately 12% of women in the general population, 28.8% of lesbians, and 26.9% of bisexual women were smokers. Among the general population 19.7% of men were smokers, 27.3% of gay men, and no significant difference was found between bisexual men and the general population. The smoking rates among the LGBT community are significantly higher than among the general population. Tobacco is a well-known, preventable risk factor for a plethora of health problems which puts the LGBT community at high risk for overall decreased health status. The results of this study

may be explained by the minority stress experienced in this population as seen in the study by Lehavot and Simoni (2011).

Another health disparity seen in the LGBT community related to minority stress is the prevalence of mental health disorders. Bolton and Sareen (2011) examined the prevalence of mental health disorders among a nationally representative sample of LGBT Americans. Gay men were more likely to have had a suicide attempt in their lifetime as well as mood, anxiety and substance abuse disorders when compared to heterosexual men. The same trend was noted in lesbians and bisexual women. Bisexual men reported higher incidence of mood and anxiety disorders, Cluster A and Cluster B personality disorders, as well as increased suicide attempts. One particularly significant finding of this study was that 25% of the bisexual women sample had attempted suicide in their lifetime, compared to 4.2% of heterosexual women that had attempted suicide in their lifetime (Bolton & Sareen, 2011). Russell and Toomey (2012) assessed the prevalence of suicidal thoughts and attempts among same-sex attracted males through analysis of four waves of the *National Longitudinal Study of Adolescent Health.* Most participants were shown to have suicidal thoughts and attempts limited to adolescent years, and minimal in adulthood (Russell & Toomey, 2012).

This study specifies the time in which same-sex attracted males are most at risk for suicide which may be partially understood within the context of Erikson's stages of psychosocial development. In this model, adolescence is the time in which the developmental stage of identity versus role confusion occurs. Confusion surrounding the sexual orientation or gender identity of adolescent may result in negative outcomes such as depression, and possibly suicide attempts (Balakas, 2009).

The Profession of Nursing and the LGBT Community

The profession of nursing has lagged in efforts to reduce health disparities among LGBT patients. Jeffreys and Dogan (2012) stated, "eliminating health disparities, improving patient outcomes, recruiting and retaining a more diverse workforce, preventing multicultural workplace conflict, and facilitating patience and employee satisfaction requires cultural competence" (p.188). While this quote is not specific to the LGBT community, the promotion of cultural competence would benefit the LGBT community, as well as other cultural groups. Recent social and political attention on gay rights and same-sex marriage in the US has made the LGBT community much more visible in society. The profession of nursing must remain current through promotion of equality for LGBT patients, and increase efforts to ensure a culturally competent and knowledgeable nursing workforce.

Nursing Research

Nursing research has inadequately addressed the health needs of the LGBT population. Between 2005 and 2009, the top 10 nursing journals published only eight articles focused on LGBT health issues out of almost 5,000 article total (Eliason, Dibble & DeJoseph, 2010). Seven of these 10 journals contained no articles published on LGBT health issues. The eight articles found focusing on LGBT issues were all by authors that were not American (Eliason, et al., 2010). These numbers show that there is a lack of research being done by American nurse researchers related to LGBT issues in the field of nursing.

The body of research that currently exists regarding the LGBT population has been found to be focused unequally on the different LGBT populations. Eliason et al. (2010) searched the databases Cumulative Index of Nursing and Allied Health Literature (CINAHL) and PubMed for the frequency of articles focusing on sexual orientation or gender identity. The term "gay"

yielded 1332 articles, “lesbian” yielded 652 articles, “bisexual” yielded 451 articles, and “transgender” issues were only highlighted in 230 articles. Shields, Zappia, Blackwood, Watkins, Wardrop, and Chapman (2012) conducted a literature review and found that many studies only investigated gay or lesbian people, while bisexual, transgender and other sexual minority groups were overlooked. While there may be more research about gays and lesbians, the entire LGBT community is linked by experiences of discrimination and being a sexual minority. Shields et al. (2012) also concluded that very few studies have been done on LGBT parents seeking healthcare for their children and no studies were found that tested the effects of specific interventions for these families to reduce discrimination. There are gaps that exist in the current literature.

Nursing Education

A Call for Change

There has been a call for improvement of nursing education regarding the LGBT population, but little work has been done. Alegria (2011) wrote, “the lack of formal education that nursing students receive on transgenderism compounds these problems, and portends continued inadequate health care in the future” (p. 175). This quote may reasonably be expanded to include the whole LGBT community, as there is current lack of formal education on this community in nursing curricula in the US. The American Association of Colleges of Nursing (AACN) published *The Essentials of Baccalaureate Education for Professional Nursing Practice* (2008) which outlined the content to be included in Bachelor of Science in Nursing degree programs. The AACN stated that “the baccalaureate program prepares the graduate to advocate for social justice, including a commitment to the health of vulnerable populations and the elimination of health disparities” (American Association of Colleges of Nursing, 2008).

"Vulnerable populations" is the closest mention of the LGBT population, or any minority group, found in *The Essentials of Baccalaureate Education for Professional Nursing Practice*. There is a lack of emphasis on LGBT cultural competence in the undergraduate nursing curriculum which needs to be addressed.

A supplement to Healthy People 2010, *A Companion Document for Lesbian, Gay, Bisexual and Transgender (LGBT) Health*, called for an increase in the number of schools of medicine and nursing that educate their students on LGBT health issues. "Cultural competency training, specific to LGBT populations, should be a standard component of all health professional training curricula and made available to the health care workforce through continuing education institutes or other appropriate mechanisms" (Gay and Lesbian Medical Association, 2010, p. 76). LGBT healthcare has since become a main objective of Healthy People 2020 (US Department of Health and Human Services, 2013). Some efforts to improve the health of LGBT people suggested by Healthy People 2020 include reducing the prevalence of human immunodeficiency virus (HIV) and sexually transmitted diseases, increasing the number of healthcare providers knowledgeable about LGBT healthcare, establishment of LGBT health centers, and giving medical students access to LGBT patients to improve cultural competence. An increased effort to answer this call for change is needed by nurse educators in order for the Healthy People 2020 goals to be achieved.

The Need for Increased Education of Healthcare Providers

Lack of knowledgeable health care providers has been identified as one of the top barriers to healthcare. According to interviews of male-to-female (MTF) transgender people, the top barrier to care was finding a provider who was knowledgeable about transgender health issues (Sanchez, Sanchez & Danoff, 2009). While the healthcare providers referenced in this study

were not specific to nursing, nurses share the responsibility to be knowledgeable about the LGBT community with the rest of the healthcare field.

Low levels of knowledge regarding the LGBT population have been shown to have detrimental effects on LGBT patients' experience in the healthcare system. These detrimental effects can be seen in an account of a female-to-male (FTM) transgender person being given a prostate exam despite informing the provider he did not have a prostate (Samuel & Zaritsky, 2008). This situation may have been avoided had the healthcare provider been knowledgeable about the anatomy of FTM people. Nurses have frequent patient contact and therefore are key members of the healthcare team who need to be educated on the LGBT community in order to promote cultural sensitivity and competence.

Education and Attitudes of Nursing Students

Nursing students have revealed low levels of knowledge as well as negative attitudes toward the LGBT population. Eliason, Donelan and Randall (1992) explored the attitudes of nursing students in regard to lesbians. Students expressed concern that because a coworker or patient was a lesbian they might try to "hit on me," "push their beliefs on me," or believed lesbians were "unnatural" (Eliason et al., 1992). Röndahl, Innala and Carlsson (2004) found that given the choice, 36% of the nursing staff and 9% of the nursing students surveyed would refrain from caring for a homosexual patient. The attitude of preferring to avoid a certain group of people reflects negative attitudes which could reduce the quality of patient care.

Not only have some nursing students been found to have negative attitudes toward the LGBT population, but published reports suggest registered nurses (RNs) who are currently employed do as well. LGBT nurses sometimes face hostile work environments because of their sexual orientation. Eliason et al. (2011) found that many LGBT nurses hold low expectations for

the level of acceptance in the workplace. LGBT nurses are commonly satisfied with a work environment that is not outright hostile rather than striving for a work environment of acceptance (Eliason, DeJoseph, Dibble, Deevey & Chinn, 2011). The problem of discrimination of LGBT people does not only include patients, but also nurses and other healthcare providers as well.

Nursing and medical students' knowledge level and attitudes about LGBT patients have also been previously studied and revealed low knowledge scores according to the Knowledge about Homosexuality Scales (1995) and the Attitudes Toward Lesbians and Gay Men (ATLG) Scale (Chapman, Watkins, Zappia, Nicol & Shields, 2011). Only 13% of the nursing students correctly answered 17 or more of the 19 statements included on the Knowledge about Homosexuality Scales correctly (Chapman et al., 2011). Kelley, Chou, Dibble, and Robertson (2007) tested the effects of education on the knowledge and attitudes about LGBT healthcare of second-year medical students. Educational methods such as lecture, guest speakers, and role play were used. The post educational survey showed a significant improvement in 4 out of 16 of the items on the survey showing that their educational program had made a positive impact. The four items that were significantly changed were:

> 1) Access to health care is the same for LGBT persons as for other members of the population.
> 2) LGBT people are less likely than heterosexual people to be in long-term monogamous relationship.
> 3) As a physician, I feel it is important for me to know about my patients' sexual orientation, sexual practices and gender identity.
> 4) I would prefer not to treat patients with gender identity issues.

There is a gap in the literature in regard to the effects of education on nursing majors' knowledge level and attitudes toward the LGBT population.

A Curriculum for the Future

Recommendations have been made as to what content should be included in a nursing curriculum on the LGBT patient population. Brennan, Barnsteiner, Saintz, Cotter, and Everett (2012) stated nursing students need to be able to define common terminology such as sex, gender, queer, and transgender. Nurses should be knowledgeable about the process of transitioning for transgender people and the possible side effects of hormone use. Nurses should not assume all patients are heterosexual and ask assessment questions in a way that leaves room for a non-heterosexual answer (Brennan et al., 2012). Röndahl (2009) identified reasons nurses are at a high risk of making hetero-normative assumptions about their patients. These reasons include,

> 1) Medical workers do not receive any education in different types of personal relationships and how these may influence a person's health.
> 2) the health care system assumes that all patients are heterosexuals.
> 3) many medical workers are not comfortable discussing issues that may portray them as prejudiced.
> 4) LGBT persons in health care are often invisible, as professionals, as patients and as relatives.

The reasons listed above may be counteracted through education about the LGBT community and promotion of cultural competence and sensitivity. Learning to communicate in an appropriate manner is essential to providing quality patient care. Without LGBT-focused education in undergraduate curricula, healthcare professionals are unprepared to care for this diverse, often overlooked population. An emphasis on transcultural nursing care early in the nursing curriculum has been recommended, because this could provide a strong foundation for cultural competence (Jeffreys & Dogan, 2012). Incorporation of formal education on cultural competence may improve undergraduate nursing students' ability and confidence regarding LGBT patient care.

Purpose

Increasing education on the LGBT community for undergraduate nursing students may help reduce hetero-normative assumptions by improving cultural competence. The purpose for this study was to address the educational needs suggested by the literature and determine if undergraduate nursing majors' knowledge, attitudes and cultural competence toward LGBT patients could be improved.

Research Questions

The following questions guided this study:

1. What is the degree of reliability of the modified Attitudes Toward Lesbians and Gay Men (ATLG) scale, the newly developed Attitudes Toward Lesbian, The Gay, Bisexual and Transgender Patients (ATLGBTP) scale, and the newly developed Knowledge of Lesbians, Gays, Bisexuals and Transgender People (KLGBT) questionnaire?
2. How effective is the educational intervention as measured by differences between pre-intervention and post-intervention knowledge and attitudes?
3. What are the perceived educational needs of undergraduate nursing majors in regard to LGBT patient care and nursing curricula?

Method

Participants

A convenience sample of 88 enrolled first-year, second-year, third-year, and fourth-year nursing majors at Illinois Wesleyan University (IWU) agreed to participate in this study. However, only participants who fully completed all materials were used for data analysis, therefore 30 partial sets of data (34%) were excluded for analysis. A total of 58 students

comprise the sample included in data analysis. Eligibility requirements included being 18 years of age or older and current enrollment as a nursing major at IWU. Demographic information was collected from all participants (see Table 1).

Measures

1. **Attitudes Toward Lesbians and Gay Men (ATLG) scale.** The modified ATLG scale was used to assess attitudes of the participants regarding the LGBT patient population before and after an educational intervention (see Figure 3). Dr. Herek, one of the authors of the original ATLG scale, was contacted on October 21, 2012, and granted permission to use the ATLG scale for this study. Herek recommended using the three item version of the ATLG scale and a five point Likert scale for scoring. The ATLG scale was expanded by the research team to include not only lesbians and gay men, but also bisexuals and transgender people. Added items were formatted as similarly as possible to the original ATLG scale items. The ATLG scale has been found reliable with a Cronbach's alpha of >0.85 with most college student samples (Herek & McLemore, 2011).

2. **Attitudes Toward Lesbian, Gay, Bisexual and Transgender Patients (ATLGBTP) scale.** The ATLGBTP scale is a six-item Likert scale which allows opportunity for written elaboration by the participants (see Figure 4). The first three items were based on questions asked of healthcare professionals in an earlier study conducted by Harris, Nightengale, and Owens (1995). The remaining three items were developed by the research team and were specific to an undergraduate nursing student population such as perceptions of competence, cultural sensitivity skills and nursing curricula.

3. **Knowledge of Lesbian, Gay, Bisexual, and Transgender People KLGBT questionnaire.** The KLGBT questionnaire is a 15-item true or false questionnaire (see Figure 5). Two items

(Q2, Q4) were taken from the Knowledge about Homosexuality Questionnaire developed by Harris, Nightengale and Owens (1995) and 13 items were developed by the research team.

Procedure

Following Institutional Review Board (IRB) approval in December 2012, participants were recruited in collaboration with four IWU professors during scheduled class time. The study was described, informed consent acquired, and a packet containing the pre- and post-tests was distributed to all possible participants. Those who chose to participate signed the informed consent (see Figure 1), all submitted the demographics sheets (see Figure 2) and pre-test to a secure location in the Illinois Wesleyan School of Nursing. The informed consent documents were detached from the demographics sheet and pre-test by the participants and submitted to the researchers separately to preserve anonymity of the participants. Gender of the participant was specifically excluded from the demographic survey to assure anonymity due to the small number of male nursing majors. All pre- and post-test materials were coded with a letter representing year in school and a number so that data collection materials could be matched for analysis. For participants studying abroad the informed consent, demographics sheet and all data collection materials were provided electronically. Responses were emailed to a designated third party to preserve anonymity of the students. The third party separated informed consents from test materials prior to delivery to the research team. No academic or monetary incentives were offered for participation in the research study and no consequences were given for refusal to participate.

The educational intervention was developed focusing on content recommended by Brennan, Barnsteiner, Saintz, Cotter, and Everett (2012). The educational intervention was in the form of a lecture using PowerPoint slides, and piloted on January 13, 2013, on an expert

panel consisting of seven members of the IWU Pride Alliance. IWU Pride Alliance is a registered student organization for students who identify as part of the LGBT community, or support the community by being an ally. The seven members were diverse in their gender and sexual orientation, representing many groups in the LGBT community. The IWU Pride Alliance members all reviewed the educational intervention voluntarily and provided feedback about the relevance of the content as well as the delivery of the content. The feedback was noted, and changes were made to the educational intervention in response. This pilot of the educational intervention promoted content validity of the educational intervention.

Data were collected on four separate occasions: two occasions on January 21, 2012, and one occasion on both January 25, 2012, and January 26, 2012. One hour of scheduled class time was allotted in a second-year, third-year, and fourth-year nursing class for the educational intervention and post-test. An additional hour was arranged on a weekend day for those first-year students whose schedules did not allow them to attend any of the times offered for upper division students. Nursing majors studying abroad participated through the use of Polycom technology so they could see and hear the lecture at the same time as their classmates. A 40-45 minute educational intervention (see Figure 6) was conducted which focused on relevant definitions, LGBT health disparities, cultural competence and transgender-specific health care. Following the educational intervention, post-tests were completed and collected by the research team.

Results

Demographics

Results were analyzed using IBM SPSS Statistics for Windows, Version 21.0. Frequencies were used to analyze demographic data of the participants. The sample contained 4

first-year students (6.9%), 6 second-year students (10.3%), 20 third-year students (34.5%) and 28 fourth-year students (48.3%). All students in the sample self-identified as heterosexual, although it is noteworthy that two students identified as homosexual but they were excluded from this analysis because they did not complete all the data collection materials. Forty-eight students indicated that they identify with a religion (82.8%) and 10 students indicated they do not identify with a religion (17.2%). Twenty-two students identified as Democrats (37.9%), 18 as Republicans (31.0%), and 16 as no political preference (27.6%).

Students were asked if they personally knew anyone who identified as a part of the LGBT community. Forty-six students indicated they knew a friend (79.3%), 32 indicated they knew an acquaintance (55.2%), 14 students indicated they knew a family member (24.1%). Students were asked what the most influential factors were regarding the LGBT community. The top three options most frequently indicated were 52 students indicated attitudes of family or friends (89.7%), 33 indicated positive or negative experience with the LGBT community (56.9%), 16 indicated attitudes of the media (27.6%), and two students indicated religion (3.4%) although this option was not listed on the demographic sheet. All demographic data may be seen in Table 1.

Reliability

Internal consistency. The degree of reliability of the modified ATLG scale was measured through internal consistency. Internal consistency is the degree to which all items on a scale measure the same trait (Polit & Beck, 2010). Internal consistency was evaluated through Cronbach's alpha. A high degree of reliability was established ($\alpha = 0.95$). The degree of reliability of the ATLGBTP scale was also evaluated through Cronbach's alpha and a suboptimal level of reliability was established in this sample ($\alpha = 0.54$). As the low number of items on this

scale may have impacted the degree of reliability, validity results of the ATLGBTP should be should be interpreted with caution.

Kuder-Richardson 20. The degree of reliability of the KLGBT questionnaire was measured through the alpha coefficient Kuder-Richardson 20 (KR-20). KR-20 is used for nominal data that are dichotomously scored, such as correct/incorrect (Waltz, Strickland & Lenz, 2010). The KLGBT questionnaire had a suboptimal level of reliability ($\alpha = 0.54$). Analysis of reliability was re-evaluated separating the nursing specific items (Q6, Q13,Q14,Q15) from items that were LGBT specific knowledge (Q1-5, Q7-12). However, removal of the general nursing knowledge items did not improve the reliability ($\alpha = 0.52$), probably because the number of total items was reduced. Deletion of low performing items identified through item-total correlations was not theoretically supported, and was not pursued. Due to the suboptimal degree of reliability of the KLGBT, validity results associated with the KLGBT should be interpreted with caution. All reliability coefficients may be seen in Table 2.

Criterion Related Validity

Paired sample *t*-tests. A paired sample *t*-test was used to determine whether the differences between pre-test and post-test responses were attributed to chance alone. Paired sample *t*-tests are commonly used to compare results from a single group of people before and after an intervention (Polit & Beck, 2010). The mean results of the modified ATLG scale all increased from pre-test to post test showing an increase in positive attitudes. The mean results out of 15 items total are as follows: gay subscale pre-score (M =11.69, SD 2.631) and post-score (M =12.07, SD 2.308), lesbian subscale pre-score (M = 11.43, SD 2.905) and post-score (M =11.97, SD 2.456), bisexual subscale pre-score (M =10.81, SD 2.672) and post-score (M =11.78, SD 2.287), transgender subscale pre-score (M =11.45, SD 2.249) and post-score (M = 12.29, SD

2.035). Differences in mean scores were considered statistically significant if the p value was less than .05 (Polit & Beck, 2010). Differences in mean scores of the lesbian, bisexual and transgender subscales were statistically significant: lesbian (t (57) = 2.578, p= 0.013), bisexual (t (57) = 3.498, p=0.001) and transgender (t (57) 4.203, p<0.0001). These results are displayed in Table 3.

The mean scores of the ATLGBTP scale all increased with one exception seen in the item regarding refusal to care for an LGBT patient (see Table 4). The question pertaining to feeling competent, able to talk to a patient in a sensitive and appropriate manner, and the IWU nursing curriculum were scored using reverse scoring (Q3,Q5,Q6). The higher the score of the ATLGBTP scale, the more positive the attitude was of the participant. Two items on the ATLGBTP scale had statistically significant differences between pre- and post-scores. These two items are "I feel competent to care for an LGBT patient" (t(57) = 3.024, p =0 .004), and "LGBT patients have no specific health needs" (t(57) = 5.035, p= <0.0001). No other items on the ATLGBTP scale had statistically significant differences between pre- and post-scores.

A statistically significant increase in KLGBT questionnaire scores was seen when comparing the total pre-score (*M* = 13.48, *SD* 1.490) and post-score (*M* = 14.67, *SD* 0 .758) of all 15 items (t (57) = 6.554, p<0.0001). These results are displayed in Table 5. A *t*-test was used to compare the difference between correct responses for each of the 15 items on the KLGBT questionnaire (see Figure 5). Five out of 15 items were statistically significant between pre- and post-tests (see Table 5.1). The items are as follows: "sex and gender have the same meaning" (t(57)=3.856, p<0.0001), "homosexual men are more likely to be victims of violent crime than the general public" (t(57)=2.055, p=0.044), "homosexuals may experience some or all of the six phases of 'coming out'" (t(57)= 2.430, p=0.018), "it is important to conduct a suicide assessment

when working with LGBT patients" ($t(57)= 3.035$, $p=0.004$), and "LGBT patients do not seek medical treatment as early as heterosexuals because of fear of discrimination" ($t(57)= 2.403$, $p=0.020$).

Frequencies

Frequencies were used to determine which questions were missed most often on the pre- and post-test KLGBT questionnaire (see Table 6). The three items that had the lowest percentages of correct pre-test student responses were "it is important to conduct a suicide assessment when working with LGBT patients" (75.9%), "homosexual men are more likely to be victims of violent crime than the general public" (77.6%), and "sex and gender have the same meaning" (79.3%). One out of 15 items was answered correctly by 100% of participants which was the false statement that "homosexual men always act and dress in a feminine way." The top four most frequently missed post-test items were the true statements "homosexual men are more likely to be victims of violent crime than the general public" (91.4%), and "it is important to conduct a suicide assessment when working with LGBT patients" (94.8%). Five out of 15 items in the post test were answered correctly by 100% of participants. These questions were the false statements "sex and gender have the same meaning," "homosexuals always want to be members of the opposite sex," "homosexual men always act and dress in a feminine way," "bisexuals will eventually 'come out' as homosexuals" and as well as the true statement "LGBT patient may present with signs of depression from lack of social acceptance."

Representative Narrative Responses from Nursing Students

In response to the educational intervention. Participants were asked to write one take away message from the educational intervention. Students had a variety of responses, but most

focused on treating LGBT patients with respect and to never make assumptions about patients.

A third-year nursing major responded:

> Be sensitive and aware! You cannot assume anything so just be aware with what you are saying and how you say it because it can make all the difference.

Another third-year nursing major responded:

> There is a definite knowledge deficit that really needs to be addressed. Possibly all doctors/nurses/providers should see a lecture on this topic.

A fourth-year nursing major responded:

> I have found I am more neutral now than being offended by LGBT population.

Several common themes were seen in comments written by participants such as the responses above. These themes included a new awareness for the importance of sensitive patient communication, the knowledge deficit among many healthcare providers, and new perspectives on the LGBT community.

In response to the nursing curriculum. Participants were given the opportunity to write freely about their perception of the current nursing curriculum at IWU regarding LGBT patient care. Students often wrote about how LGBT patient care was never discussed in the classroom, with the exception of the educational intervention used in the current study.

A first-year nursing major responded:

> This lecture helped me understand different genders and attitudes towards one another, but this research project was not mandatory, so I think some class here should focus on this.

A second-year nursing major responded:

> I think that LGBT information should be touched on in each class- especially in the clinical setting.

Students recognized the need for more education in the nursing curriculum focusing on LGBT specific healthcare. Students felt the educational intervention was informative, and provided new knowledge not currently covered in the curriculum.

Discussion

There were several areas of significant change after the brief educational intervention developed for this pilot study. Changes in attitudes toward lesbians, bisexuals and transgender people were all significantly improved as seen through an increase in mean scores. One finding of this study was that students had the most negative attitudes toward bisexuals as seen through comparison of mean scores from the modified ATLG scale. Eliason, Dibble, and DeJoseph (2010) found that transgender people were the least researched. Based on this information, transgender people were expected to have the lowest mean score on the modified ATLG scale, but surprisingly our results indicated bisexuality was met with the most negative attitudes. Further research is needed to investigate the cause of this unexpected outcome.

Knowledge was significantly improved as seen through the statistically significant increase in the mean scores of the KLGBT questionnaire. These findings are consistent with the study conducted by Kelley, Chou, Dibble, and Robertson (2007) with medical students in which 4 of 16 items were significantly improved. Comparably, 5 of 15 items were significantly improved in the current study. A notable difference between these studies is that in the Kelley, et al. (2007) study, two hours of time were allotted and the educational method used was a patient panel and case studies. The current study used a lecture format, and only 40-45 minutes were allotted. Representative narrative responses from participants in the current study also reflected an increase in knowledge and cultural sensitivity. Students indicated a variety of content areas that were new knowledge, and that they were receptive to the key points of the

education intervention regarding cultural competence and sensitivity. The brief educational intervention used in this study demonstrated the potential to have a significant impact on students' knowledge and attitudes.

Undergraduate nursing students indicated they felt the current nursing curriculum inadequately addressed LGBT patient care. This can be seen through the representative comments as well as the low score given to the item (Q6) regarding the nursing curriculum on the ATLGBTP scale. While the mean score did improve, both scores were low indicating a low level of perceived adequacy regarding LGBT content. This finding supports future incorporation of content regarding LGBT patient care into undergraduate nursing curricula.

Limitations

This study had several potential limitations, as this was a pilot study of the newly developed educational intervention which used previously psychometrically untested measures. No established tools were found that met the study's needs the ATLGBTP scale and KLGBT questionnaire were developed by the research team. As a result, reliability for both tools was suboptimal and revision of the tools is needed before used in subsequent studies. The KLGBT questionnaire could be modified to include only questions generally related to the LGBT population, and not specific nursing knowledge. Upon review, it was noted that some items on the KLGBT questionnaire could be answered based solely on having established test-taking skills, rather than actual knowledge regarding the LGBT population.

The educational intervention was limited by time-constraints and could have been more effective in a longer program. Three out of four educational interventions were conducted during scheduled class time, which meant professors had to adjust their syllabi to accommodate time given to the educational intervention. The choice to conduct these educational interventions

during class time was intended to encourage participation. However, this did limit the amount of content that could be included. Question four on the KLGBT questionnaire regarding homosexual men being at more risk for violence was not included in the content provided, which may explain the lower percentage of correct responses on this item when compared to other items. Future studies could be strengthened with expansion of the educational intervention to include a multimodal approach to learning in the form of case studies or a guest speaker who identifies as part of the LGBT community.

Timing of recruitment and lack of control over data collection impacted sample size. The second-year students were recruited at 8:00am the beginning of their first class session after winter break on January 8th, 2012, whereas other classes were recruited later that day or later in the week. Second-year nursing students may not have been fully engaged during the recruitment, and as a result fewer second-year students participated. Second-year participants studying abroad were able to watch the educational intervention through the use of Polycom technology; however this may have been a deterrent from participation in the study. Students who chose to participate were instructed to email their pre- and post-test materials to a designated third party to preserve anonymity. This method of data collection was less convenient than students who were physically present during the educational intervention. All participants were responsible for turning in pre- and post-tests to a designated area in the School of Nursing. This lack of control may also have impeded participation.

The convenience sample recruited has limited generalizablity to all undergraduate nursing students. The sample recruited was only from one school of nursing and this group had a high degree of homogeneity. This study was cross-sectional, so whether or not changes in attitudes and knowledge were retained long term needs to be evaluated in a longitudinal study.

Conclusion

Nursing students in previous studies have been noted as having a great need for improved knowledge and cultural competence regarding LGBT patients (Chapman, et al., 2011). This study demonstrated that a brief educational intervention had the power to improve attitudes and improve knowledge level regarding LGBT patient care. These findings are consistent with results reported in the Kelly et al. (2008) study where an educational intervention was conducted on medical students and changes in attitudes were observed. Based on this pilot study, undergraduate schools of nursing should incorporate content about the LGBT patient population into the curriculum to ensure a competent nursing workforce.

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Appendix A: Tables

Table 1

Demographic Data of Students (n=58)

Year in School	First-year	4 (6.9%)
	Second-year	6 (10.3%)
	Third-year	20 (34.5%)
	Fourth-year	28 (48.3%)
Sexual Orientation	Heterosexual	58 (100%)
Religious Affiliation	Yes	48 (82.8%)
	No	10 (17.2%)
Political Party	Democrat	22 (37.9%)
	Republican	18 (31.0%)
	No preference	16 (27.6%)
	Other	1 (1.7%)
Know an LGBT…	Family member	14 (24.1%)
	Friend	46 (79.3%)
	Significant Other	0 (0%)
	Acquaintance	32 (55.2%)
	Coworker	12 (20.7%)
	Neighbor	4 (6.9%)
	Teacher	10 (17.2)
	Nobody	1 (1.7%)
Factors Affecting Attitudes	Family or friends	52 (89.7%)
	Media	16 (27.6%)
	Political party	6 (10.3%)
	Sexual orientation	9 (15.5%)
	Positive/negative experience	33 (56.9%)
	Religion*	2 (3.4%)

* write in item

Table 2

Reliability of All Measures (n=58)

Measure	α
Modified ATLG scale (12 items)	0.94
ATLGBTP scale (6 items)	0.54
KLGBT questionnaire (15 items)	0.54

Table 3

t-Test Results of ATLG Scale: Mean Scores (n=58)

Subscale	Total Score (pre-test)	*SD*	Total Score (post-test)	*SD*	Mean difference	*t*	df	Sig. (2-tailed)
Gay	11.69	2.631	12.07	2.308	0.379	1.873	57	0.066
Lesbian	11.34	2.905	11.97	2.456	0.621	2.578	57	0.013*
Bisexual	10.81	2.672	11.78	2.287	0.966	3.498	57	<0.001*
Trans-gender	11.45	2.249	12.29	2.035	0.845	4.203	57	0.000*

* significant at .05 level

Table 4

t-Test Results of ATLGBTP scale: Mean Scores (n=58)

Item	Mean Pre-test	*SD*	Mean Post-test	*SD*	*t*	df	Sig (2-tailed)
Prefer not to care	4.41	0.676	4.53	0.569	1.629	57	0.109
Refuse to care	4.79	0.409	4.76	0.432	-.574	57	0.568
Competence	3.52	1.906	3.88	0.110	3.024	57	0.004*
No specific health needs	3.84	0.745	4.41	0.593	5.035	57	0.000*
Sensitive and appropriate	4.17	0.772	4.17	0.775	1.383	57	0.172
Curriculum	2.21	0.796	2.35	0.876	1.211	57	0.231

* significant at .05 level

Table 5

t-Test Results of KLGBT Questionnaire: Mean Scores of Total Correct/15 Items (n=58)

Mean Score/15 (pre-test)	Mean Score/15 (post-test)	*t*	df	Sig. (2-tailed)
13.48	14.67	6.699	57	0.000*

* significant at .05 level

Table 5.1

t-Test Results of KLGBT Questionnaire: Individual Items (n=58)

Item	*t*	df	Sig. (2-tailed)
Sex and gender have the same meaning	3.856	57	0.000*
Most homosexuals want to be members of the opposite sex	1.427	57	0.159
Homosexual men always act and dress in a feminine way	^	^	^
Homosexual men are more likely to be victims of violent crime than the general public	2.055	57	0.044*
Homosexuals may experience some or all of the six phases of "coming out"	2.430	57	0.018*
It is important to conduct a suicide assessment when working with LGBT patients	3.035	57	0.004*
Bisexuals will eventually "come out" as homosexuals	1.000	57	0.322
Bisexual behavior is often just a cry for attention	0.444	57	0.659
In order to be considered transgender a person must have undergone a sexual reassignment surgery	1.934	57	0.058
Transgender women (male to female) are always attracted to people with male genitals	1.000	57	0.322
A transgender person should be addressed using pronouns of the preferred gender rather than biological sex	1.934	57	0.058
Homosexual women always dress and act in a masculine way	0.000	57	1.000
LGBT patients do not seek medical treatment as early as heterosexuals because of fear of discrimination	2.403	57	0.020*
Most health care providers automatically make the assumption that their patient is heterosexual if they have not specifically addressed sexual orientation	1.657	57	0.103
LGBT patients may present with signs of depression due to lack of social acceptance	^	^	^

^ the t statistic could not be computed due to the standard error of the mean differences being 0.

* significant at .05 level

Table 6

Frequencies of Correct Responses on KLGBT Questionnaire (n=58)

Item	Pre-test (%)	Post-test (%)
Sex and gender have the same meaning	46 (79.3)	58 (100)
Most homosexuals want to be members of the opposite sex	56 (96.6)	58 (100)
Homosexual men always act and dress in a feminine way	58 (100)	58 (100)
Homosexual men are more likely to be victims of violent crime than the general public	45 (77.6)	53 (91.4)
Homosexuals may experience some or all of the six phases of "coming out"	49 (84.5)	56 (96.6)
It is important to conduct a suicide assessment when working with LGBT patients	44 (75.9)	55 (94.8)
Bisexuals will eventually "come out" as homosexuals	57 (98.3)	58 (100)
Bisexual behavior is often just a cry for attention	55 (94.8)	56 (96.6)
In order to be considered transgender a person must have undergone a sexual reassignment surgery	52 (89.7)	57 (98.3)
Transgender women (male to female) are always attracted to people with male genitals	55 (94.8)	57 (98.3)
A transgender person should be addressed using pronouns of the preferred gender rather than biological sex	51 (87.9)	56 (96.6)
Homosexual women always dress and act in a masculine way	57 (98.3)	57 (98.3)
LGBT patient do not seek medical treatment as early as heterosexuals because of fear of discrimination	48 (82.8)	56 (96.6)
Most health care providers automatically make the assumption that their patient is heterosexual if they have not specifically addressed sexual orientation	53 (91.4)	57 (98.6)
LGBT patients may present with signs of depression due to lack of social acceptance	58 (100)	58 (100)

Appendix B: Figures

Figure 1

Informed Consent

I understand that I am being asked to participate in a research study through Illinois Wesleyan University. The purpose of this study is to evaluate the current knowledge and attitudes of undergraduate nursing majors in regards to lesbian, gay, bisexual and transgender patients. If I agree to participate in this study, I will attend one educational lecture and complete a pre and post survey. My responses will be anonymous. All information will be placed in a locked file cabinet in Stevenson Hall on Illinois Wesleyan University's campus. Signed informed consents will be immediately separated from the demographic and survey data to assure anonymity.

The risks in this study are minimal. Major risks that may be encountered include boredom, loss of time, and psychological or emotional distress resulting from controversial lecture information. Should the participant experience any psychological or emotional distress the student is encouraged to contact Illinois Wesleyan University Counseling and Consultation Services at (309) 556-3052.

I realize that the knowledge gained from this study may help either me or undergraduate nursing students become more knowledgeable and competent in caring for lesbian, gay, bisexual or transgender patients.

I realize that my participation in this study is entirely voluntary. I may withdraw from the study at any time I wish. If I decide to not participate in this study, no negative academic consequences will occur.

I understand that all study data and identifying information will be kept confidential. However, this information may be used in nursing publications or presentations.

I understand that if I sustain injuries from my participation in this research project, I will not be automatically compensated by Illinois Wesleyan University.

If I need to, I can contact Kristy Strong or Dr. Victoria Folse at (309) 556-3051, School of Nursing, Illinois Wesleyan University any time during the study. If you have questions or concerns regarding this study and would like to speak with someone other than the researchers, you may contact Dr. James Sikora, Institutional Review Board Chair, Illinois Wesleyan University, at (309) 556-3163, jsikora@iwu.edu.

I have read and understand this consent form, all of my questions have been answered, and I voluntarily agree to participate. I understand that a copy of this informed consent and the survey are available upon request.

_____ Date _____

Signature of Participant

*must be 18 years old to participate

Figure 2

Demographics

1. What year in college are you?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior

2. What is your sexual orientation?

- ☐ Heterosexual
- ☐ Homosexual
- ☐ Bisexual
- ☐ Prefer not to answer
- ☐ Other:_____ **please specify*

3. Do you affiliate with any type of religion?

- ☐ Yes
- ☐ No

4. What is your political party preference?

- ☐ Democratic
- ☐ Republican
- ☐ Green
- ☐ Libertarian
- ☐ No preference
- ☐ Other:_____ **please specify*

5. Do you personally know anyone who identifies as lesbian, gay, bisexual or transgender? Check all that apply:

- ☐ Family member
- ☐ Friend
- ☐ Significant other
- ☐ Acquaintance
- ☐ Coworker
- ☐ Neighbor
- ☐ Teacher
- ☐ Other:_____ **please specify*
- ☐ I do not know anyone

6. Rank top three most influential factors on your attitudes towards lesbians, gays, bisexuals and transgender people?

- ☐ The attitudes of my family
- ☐ The attitudes of my friends
- ☐ The media
- ☐ My political affiliation
- ☐ My sexual orientation
- ☐ Personal positive experience with LGBT community
- ☐ Personal negative experience with LGBT community

Comments:_____
_____
_____
_____
_____
_____

Figure 3

Modified Attitudes Toward Lesbians and Gay Men (ATLG) scale

Assessing Undergraduate Nursing Students' Knowledge, Attitudes and Cultural Competence in Caring for LGBT Patients

Pre-Survey

*Read each statement and circle your level of agreement or disagreement on the scale below. All responses will be kept anonymous.

ATLG: Attitudes Toward Gay Men Subscale

1. Sex between two men is just plain wrong.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2. I think male homosexuals (gays) are disgusting.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3. Male homosexuality is a natural expression of sexuality in men.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

ATLG: Attitudes Toward Lesbians Subscale

1. Sex between two women is just plain wrong.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2. I think female homosexuals (lesbians) are disgusting.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3. Female homosexuality is a natural expression of sexuality in women.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

ATLG: Attitudes Toward Bisexuals Subscale

1. Having sex with both males and females is just plain wrong.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2. I think bisexuals are disgusting.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3. Bisexuality is a natural expression of sexuality in males and females.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

ATLG: Attitudes Toward Transgender People Subscale

1. A person who feels that their sex (male or female) does not match their gender identity (masculine or feminine) is just plain wrong.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2. I think transgender people are disgusting.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3. Being transgender is a natural expression of gender identity in men and women.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Figure 4

Attitudes Toward Lesbian, Gay, Bisexual and Transgender Patients (ATLGBTP) scale

1. I would prefer not to provide nursing care for LGBT patients.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2. I would refuse to care for an LGBT patient if I were aware they identify as LGBT.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3. I feel competent to provide nursing care for LGBT patients.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

4. LGBT patients do not have any specific health needs.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

5. I feel I would be able to talk with a patient who identifies as LGBT in a sensitive and appropriate manner.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

6. I believe the IWU nursing curriculum adequately addresses the LGBT population.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

7. If you answered neutral, disagree or strongly disagree please write what is currently lacking from the curriculum and where in the current curriculum this content would best fit:

_____
_____
_____
_____

8. Please provide general comments about any of the above items here:

_____
_____
_____
_____

Figure 5

Knowledge of Lesbians, Gays, Bisexuals and Transgender People (KLGBT) Questionnaire

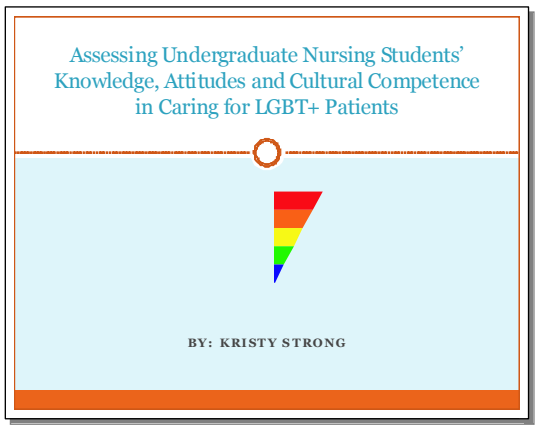
Pre-Survey

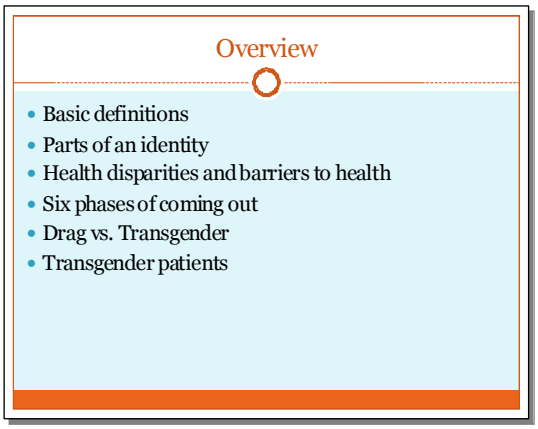
* Please indicate if the following statements are true or false

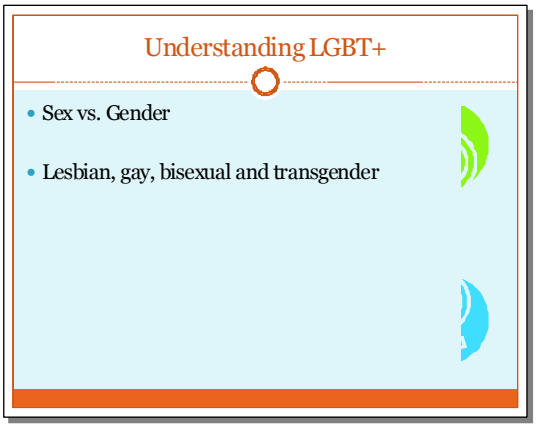
	True or False
1. Sex and gender have the same meaning.	_____
2. Most homosexuals want to be members of the opposite sex.	_____
3. Homosexual men always act and dress in a feminine way.	_____
4. Homosexual men are more likely to be victims of violent crime than the general public.	_____
5. Homosexuals may experience some or all of the six phases of "coming out."	_____
6. It is important to conduct a suicide assessment when working with LGBT patients.	_____
7. Bisexuals will eventually "come out" as homosexuals.	_____
8. Bisexual behavior is often just a cry for attention.	_____
9. In order to be considered transgender, a person must have undergone a sexual reassignment surgery.	_____
10. Transgender women (male to female) are always attracted to people with male genitals.	_____
11. A transgender person should be addressed using pronouns of the preferred gender rather than biological sex.	_____
12. Homosexual women always dress and act in a masculine way.	_____
13. LGBT patients do not seek medical treatment as early as heterosexuals because of fear of discrimination.	_____
14. Most health care providers automatically make the assumption that their patient is heterosexual if they have not specifically addressed sexual orientation.	_____
15. LGBT patients may present with signs of depression due to lack of social acceptance.	_____

Figure 6

Educational Intervention







Nursing and LGBT issues

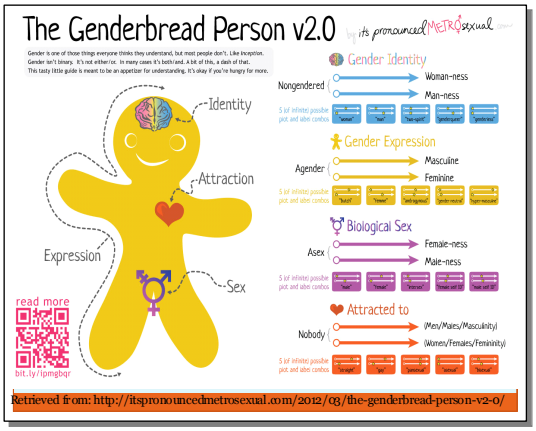
- Nursing students' and staff's negative attitudes toward LGBT patients
  - (R?ndahl, Innala & Carlsson, 2004)
- Lack of curricular content focusing on the LGBT population
  - (Kelley, Chou, Dibble & Robertson , 2007)

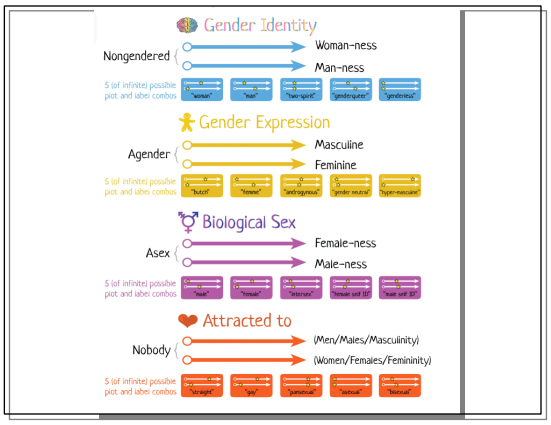
How can this be fixed?

- Education
- Reduce invisibility of LGBT population in healthcare
- Profession of Nursing put more focus on researching LGBT health

To Treat Me, You Have to Know Who I Am

- http://www.youtube.com/watch?v=XqH6GU6TrzI





Health Risks

- Depression
- Substance abuse
  - tobacco use

Risk of Suicide

- Higher number of suicide attempts among LGB individuals in Canada (Bolton & Sareen, 2011)
- Recent suicide of five gay teens as a result of bullying shocked America and called light to this issue of suicide among gay teens (Hubbard, 2010)

Health Disparities

- Marginalization and discrimination are linked to health disparities
  - (McCabe, S., Bostwick, W., Hughes, T., West, B., & Boyd, C. ,2010)
  - (Lehavot & Simoni, 2011)

Barriers to Healthcare

- Lack of insurance
  - (Jenner, 2010)
- Fear of discrimination
  - (Jenner, 2010)
- Hetero-normative assumptions made of patients
  - (Rondahl, 2009)
- Lack of competent healthcare professionals
  - (Sanchez, Sanchez & Danoff, 2009)

Nursing Assessment and Communication

- Ask open ended questions
- Use gender-neutral language
  - (Weinberg, 2009)
- Ask about social support, comfort with sexuality, sexual health
- Assess for common health problems such as substance abuse and depression

Special Consideration: LGBT parents

- May request in vitro fertilization and surrogacy
- Hetero-normative assumption

Six Phases of Coming Out

- Identity Confusion
- Identity Comparison
- Identity Tolerance
- Identity Acceptance
- Identity Pride
- Identity Synthesis

(Cass, 1979)

Current Recommended Therapy for Transgender Patients

- Triadic Therapy (Standards of Care: WPATH, 2011)
  - Evaluation by a mental health provider
  - Hormones may be prescribed
  - Must live as desired gender for one year before undergoing sex reassignment surgery

Transgender Patients and Hormone Use

Estrogen for MTF

- gynecomastia, softer skin, reduced testicular volume, decreased erectile function, decreased hair growth and libido, enlargement of nipples
- meds: oral estradiol 6-8mg PO or sublingual daily, oral conjugated estrogens 5mg PO daily, transdermal estradiol two 0.1mg patches changed twice weekly, progestin 5-10mg daily for 10 days a month, spironolactone 200-400mg PO daily, finasteride 6mg PO daily (Alegria, 2011)

Testosterone for FTM

- deepening of voice, increased aggression and libido, cessation of menses, hirsutism, clitoral growth, breast atrophy, redistribution of fat, laryngeal prominence
- meds: testosterone enanthate 75-100mg IM weekly, or 150-200mg IM q 2 weeks, transdermal testosterone patch 5-7.5mg changed daily, transdermal testosterone gel 5-10mg applied daily (Alegria, 2011)

Surgery

- MTF: breast implants, facial reconstruction, sexual reassignment which may involve the construction of a vagina from the scrotal sac, a clitoral body from the glans penis, and possible orchiectomy (removal of testicles) (Jenner, 2010) .
- FTM: may undergo double mastectomy, or sexual reassignment surgery called metoidoplasty which involves lengthening the clitoris and implanting silicone testicles. May also choose to remove uterus and ovaries (Djordjevic et at, 2009).

Isis King: America's Next Top Model Contestant

Conclusion

- Every LGBT patient is individual!
- Nurses need to be aware that there is diversity among their patients and should not make assumptions about patients' sexual orientation or gender identity.
- Nurses should foster a therapeutic environment for LGBT patients so they feel comfortable being open about their identity with the nurse.

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